

SUMMARY OF THE SUBSTANCE OF INTERVIEW

The non-final office action mailed October 31, 2005 recited a restriction requirement. Examiner Thomas mistakenly stated that Applicant's representative provisionally elected to prosecute the invention of Group I (claims 1-30, 43 and 44, drawn to a product) in a telephone conference on October 24, 2004. This election was never made. The fact that no election was made was discussed with the Examiner in a second telephone conference on November 7, 2005. At this time Examiner Thomas determined that no election was made and that there should be no restriction requirement in the office action dated October 31, 2005. The Examiner withdrew any pending restriction requirement and stated that all of the claims pending in this application have been acted on in the non-final office action dated October 31, 2005.

REMARKS

The Office Action dated October 31, 2005 has been reviewed and the comments of the U.S. Patent and Trademark Office have been considered. Applicant would like to thank the Examiner for extending the courtesy of interviews on October 24, 2005 and November 7, 2005. The above amendments to the claims and the following remarks are respectfully submitted to place the application in condition for allowance. By this Amendment, Applicants have cancelled claims 1, 3-5, 9, 11-17, 19, 21, 23, 25-31 and 33-43. Claims 7, 10 and 22 have been amended to correct dependencies and small typographical errors. No new matter has been added by these amendments. In addition, new claims 45-72 have been added. Support for these claims can be found throughout the specification, for example, paragraphs 6, 8, 10, 26-31, 33, 36-41 and figures 4a and 4b. No new matter has been added. Accordingly, claims 2, 6-8, 10, 18, 20, 22, 24, 32 and 44-72 are currently pending in this Application.

Rejections Under 35 U.S.C. §103(a)

Claims 1-14, 17-28, 43 and 48 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hsu (U.S. Patent 5,040,582) in view of Brown (U.S. Patent 671,467). The Examiner states the Hsu discloses the invention primarily as claimed, namely a laminated wood board comprising several layers of veneer. In Hsu, the Examiner contends that the first layer has a loose side in contact with the loose side of the second layer and the tight side of the second layer in contact with the tight side of the third layer, and so on. The Examiner then states that Hsu does not disclose the grain orientation of the laminate. Brown supposedly cures this deficiency in that varying the grain orientation in wood veneer laminates is old in the art in order to provide the desired structural properties. The Examiner concludes that it would have been

obvious to one of ordinary skill in the art to vary the grain orientation of the layers in the laminate of the primary reference (Hsu) in view of the teachings of the secondary reference (Brown) in order to provide desired physical properties for a particular end use. In addition, the Examiner claims that it would have been obvious to select any amount of layers and a resulting thickness for the article of the primary reference (Hsu) depending on the structural properties for a particular use.

Applicant respectfully traverses the rejection. Claims 1, 3-5, 9, 11-14, 17, 19, 21, 23, 25-28 and 43 have been canceled in the present amendment, thus making the rejection moot as applied to these claims. These claims were drawn to a wood board oriented so that the grains of the successive layers are bilaterally aligned, *i.e.*, the grains run perpendicular to each other, as illustrated in Fig. 3 (“Further, the grain of each board is running in a direction that is oriented 90 degrees from the other layer.” Page 5, Paragraph 26.) The remaining claims, as well as newly added claims 45-72, are directed to a wood board with the grains of the successive layers unilaterally aligned, and methods of producing these boards. As shown in Fig. 4a, and defined in the specification, “unilateral” means “aligning the individual layers of wood so that, in the finished board, the grains of the individual layers run parallel to each other.” Page 6, Paragraph 27.

One advantage of the unilaterally aligned wood board of the present application is the improved appearance of the finished laminate. “The present invention also provides for the production of hardwood laminated boards having two or more layers aligned unilaterally such that the finished product can be milled or finished along the long edge of the board to produce an improved finished appearance.” Page 2, Paragraph 8. As Applicant explains, “Conventional laminated boards can be inappropriate for use in some applications, however, because the

manner in which the layers are oriented with respect to one another does not allow for an attractive appearance on finished edges of the laminated board or does not provide for the strength needed for many uses.” Page 1, Paragraph 6. Application further explains in the specification that the bilateral arrangement of laminate boards (as illustrated in Fig. 3) provides problems:

The conventional lay up of layers as shown in Figure 3 may be problematic for use in finished laminated board production, however, because the end grains of the individual layers face in different directions, as shown. If any edge of two layer construction is milled, the individual layers can look very different because of their different grain orientation and the differential response to the milling tool. This results in a finished edge that does not look like finished edge on a solid piece of wood and that can be unappealing aesthetically.” Page 6, Paragraph 26.

Orientation of the layers with the grain pattern in the same direction provides the unexpected result of improved aesthetics. Page 9, Paragraph 33.

The Hsu patent contemplates a method of producing laminated wood boards from at least two different species of wood with increased structural stability. Col. 2, L. 57-62. These wood boards are appropriate for structural applications, such as “truck box beds, rail car floors and the like.” Col. 2, L. 31-33; Col. 3, L. 67 – Col. 4, L. 2. The application generally concerns the orientation of the loose and tight faces of the wood layers in order to provide structural stability and to decrease shrinkage and cracking of the produced boards. Col. 3, L. 31-39. Brown discloses a process of manufacturing wood boards for use in the construction of boxes, wood cases or roof boards. Col. 1, L. 11-15. The boards described in Brown are produced with perpendicular grains, or a bilateral orientation. Col. 2, L. 69.

In levying an obviousness rejection under 35 U.S.C. 103, the Examiner has the burden of establishing (1) some suggestion or motivation to modify the reference or to combine reference teachings, (2) a reasonable expectation of success, and (3) that the prior art references, when

combined, teach or suggest all the claim limitations. See MPEP §2143 (Aug. 2001, Latest Revision August 2005). Here, the Examiner has not met this burden. Both of the cited patents disclose wood boards with structural stability appropriate for industrial applications, teaching away from Applicant's presently claimed invention of a wood board providing increased *aesthetic* (rather than *structural*) properties. In addition, combining the two references would not result in Applicant's presently claimed invention. As acknowledged by the Examiner, Hsu does not describe the grain orientation of the successive layers of the wood board. This defect is not cured in the secondary reference. Brown describes a multi-ply board, exhibiting improved strength, produced by orienting the grains of the successive layers at a 90-degree angle (perpendicular or bilateral). Thus, the combination would not result in Applicant's claimed invention, which recites parallel grain layers and an improved finished appearance. Applicant respectfully requests withdrawal of the rejection.

Claims 15, 16, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu in view of Brown as applied to claims 1-14, 17-28, 43 and 44 above, and further in view of Hasegawa (U.S. Patent No. 4,747,899). The Examiner states that Hasegawa discloses the desirability of laminating metal layers to wood veneer. The Examiner further states that it would have been obvious to one of ordinary skill in the art to laminate any well-known metal layer in the laminate of the primary reference in view of the teachings on the secondary reference depending on the desired structural properties of the laminate.

Claims 15, 16, 29 and 30 have been canceled and are no longer pending in the present application, thus making the above-recited objection moot. Withdrawal of the rejection is respectfully requested.

Claims 31-42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu in view of Brown as applied to claims 1-14, 17-28, 43 and 44 above, and further in view of Applicant's acknowledged state of the art. The Examiner states that the primary reference discloses laminating layers of wood together using adhesive. The Examiner further states that Applicant acknowledges that the processes used to make the instant invention are well known. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to use the well-known laminating methods to form the article of the primary reference depending on the desired physical properties for a particular use.

Claims 31 and 33-42 have been canceled and are no longer pending in the present application, thus making the above-recited rejection moot as applied to those claims. Claim 32 recites a method of fabricating the wood board of the present invention wherein the grains of the layers of the resulting board are aligned unilaterally. As discussed above and acknowledged by the Examiner in the office action dated October 31, 2005, Hsu does not describe the grain orientation of the successive layers of the wood board. This defect is not cured in the secondary reference as Brown describes a multi-ply board produced by orienting the grains of the successive layers at a 90-degree angle (perpendicular or bilateral). Both Hsu and Brown emphasize the increased strength of the boards described in the references, teaching away from Applicant's board exhibiting improved aesthetic qualities. Thus, the combination of Hsu and Brown would not result in Applicant's claimed invention a wood board with parallel grain layers and an improved finished appearance. Applicant respectfully requests withdrawal of the rejection.

CONCLUSION

Applicant respectfully submits that the claims now stand ready and in condition for allowance. Based on the foregoing, further and favorable action on the merits is respectfully requested. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

By: Kellie L. Carden
Kellie L. Carden
Registration No. 52,696

Patton Boggs, LLP
8484 Westpark Drive
9th Floor
McLean, Virginia 22102
(703) 744-7919 (direct)
(703) 744-8001 (facsimile)
kcarden@pattonboggs.com